



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

5/27/2016

Certified Mail

Mr. Chris Meister
HANNON ELECTRIC COMPANY
1605 Waynesburg Dr. SE
Canton, OH 44707

No	TOXIC REVIEW
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MODELING SUBMITTED
No	SYNTHETIC MINOR TO AVOID TITLE V
No	FEDERALLY ENFORCABLE PTIO (FEPTIO)
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 1576000652
Permit Number: P0120797
Permit Type: Initial Installation
County: Stark

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**
- **What should you do if you notice a spill or environmental emergency?**

How to appeal this permit

The issuance of this PTIO is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
77 South High Street, 17th Floor
Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

Please complete a survey at www.epa.ohio.gov/survey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

What should you do if you notice a spill or environmental emergency?

Any spill or environmental emergency which may endanger human health or the environment should be reported to the Emergency Response 24-HOUR EMERGENCY SPILL HOTLINE toll-free at (800) 282-9378. Report non-emergency complaints to the appropriate district office or local air agency.

If you have any questions regarding your permit, please contact Canton City Health Department at (330)489-3385 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Michael E. Hopkins, P.E.
Assistant Chief, Permitting Section, DAPC

Cc: Canton



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
HANNON ELECTRIC COMPANY**

Facility ID:	1576000652
Permit Number:	P0120797
Permit Type:	Initial Installation
Issued:	5/27/2016
Effective:	5/27/2016
Expiration:	5/27/2026



Division of Air Pollution Control
Permit-to-Install and Operate
for
HANNON ELECTRIC COMPANY

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Final Permit-to-Install and Operate
HANNON ELECTRIC COMPANY
Permit Number: P0120797
Facility ID: 1576000652
Effective Date: 5/27/2016

Authorization

Facility ID: 1576000652
Application Number(s): A0056002
Permit Number: P0120797
Permit Description: Installation of two High Temp Heat Cleaning Ovens.
Permit Type: Initial Installation
Permit Fee: \$300.00
Issue Date: 5/27/2016
Effective Date: 5/27/2016
Expiration Date: 5/27/2026
Permit Evaluation Report (PER) Annual Date: Apr 1 - Mar 31, Due May 15

This document constitutes issuance to:

HANNON ELECTRIC COMPANY
1605 WAYNESBURG DR. SE
CANTON, OH 44707

of a Permit-to-Install and Operate for the emissions unit(s) identified on the following page.

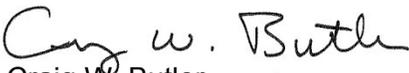
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Canton City Health Department
420 Market Avenue
Canton, OH 44702-1544
(330)489-3385

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency


Craig W. Butler
Director



Final Permit-to-Install and Operate
HANNON ELECTRIC COMPANY
Permit Number: P0120797
Facility ID: 1576000652
Effective Date: 5/27/2016

Authorization (continued)

Permit Number: P0120797

Permit Description: Installation of two High Temp Heat Cleaning Ovens.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	N003
Company Equipment ID:	Steelman High Temp Heat Cleaning Oven
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	N004
Company Equipment ID:	Big Ace High Temp Heat Cleaning Unit
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



Final Permit-to-Install and Operate
HANNON ELECTRIC COMPANY
Permit Number: P0120797
Facility ID: 1576000652
Effective Date: 5/27/2016

A. Standard Terms and Conditions

1. What does this permit-to-install and operate ("PTIO") allow me to do?

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. What are my permit fees and when do I pay them?

There are two fees associated with permitted air contaminant sources in Ohio:

PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

5. When does my PTIO expire, and when do I need to submit my renewal application?

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is

very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

6. What happens to this permit if my project is delayed or I do not install or modify my source?

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. What reports must I submit under this permit?

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions of this permit will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.

10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the [DO/LAA] in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

12. What happens if one or more emissions units operated under this permit is/are shut down permanently?

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emission unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

13. Can I transfer this permit to a new owner or operator?

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

15. What happens if a portion of this permit is determined to be invalid?

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.



Final Permit-to-Install and Operate
HANNON ELECTRIC COMPANY
Permit Number: P0120797
Facility ID: 1576000652
Effective Date: 5/27/2016

B. Facility-Wide Terms and Conditions



1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
 - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (1) None.



Final Permit-to-Install and Operate
HANNON ELECTRIC COMPANY
Permit Number: P0120797
Facility ID: 1576000652
Effective Date: 5/27/2016

C. Emissions Unit Terms and Conditions

1. N003, Steelman High Temp Heat Cleaning Oven

Operations, Property and/or Equipment Description:

Steeleman High Temp Heat Cleaning Oven used to remove varnish from electrical parts, natural gas fired with 0.38 mmBtu/hr primary burner and secondary combustion chamber with 0.74 mmBtu/hr burner.

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. b)(1)b.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/2001 [Best Available Technology (BAT) for sources installed in August 2007 and pollutants less than 10 TPY]	Volatile organic compound (VOC) emissions shall not exceed 0.009 lb/hr and 0.040 ton/yr. Requirements for particulate matter less than 10 microns in size (PM ₁₀) are equivalent to OAC rule 3745-17-09 See b)(2)a, b)(2)b, b)(2)c, c)(2), and c)(5).
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/1/ 2006.	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM ₁₀ and VOC emissions from this air contaminant source since the controlled potential to emit is less than 10 tons/year, taking into account the requirements from OAC rule



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		3745-17-09. See b)(2)d.
c.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
d.	OAC rule 3745-17-09(B)	Particulate emissions shall not exceed 0.10 lb PE per 100 lbs liquid, semi-solid, or solid refuse and salvageable material charged. See c)(1)-(5)
e.	OAC rule 3745-17-09(C)	See b)(2)e.
f.	OAC rule 3745-18-06(E)	See b)(2)f.

(2) Additional Terms and Conditions

- a. All particulate emissions are considered to be PM₁₀.
- b. The uncontrolled potential emissions of nitrogen oxides (NO_x), carbon monoxide (CO), and sulfur dioxide (SO₂) from the combustion on natural gas in this emissions unit are negligible (less than 1 ton/year), and therefore emissions limits for this pollutant have not been established.
- c. This Best Available Technology (BAT) emission limit applies until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the Ohio State Implementation Plan (SIP).
- d. These requirements apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio SIP.
- e. Incinerators including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.
- f. This emissions unit is exempt from the requirements of OAC rule 3745-18-06(E) pursuant to OAC rule 3745-18-06(C) because the process weight rate of this emissions unit is equal to or less than 1,000 pounds per hour, taking into account the operational restriction in c)(5).

c) Operational Restrictions

- (1) This emissions unit shall be installed, operated and maintained in accordance with the manufacturer's specifications. The permittee shall not change any of the manufacturer's factory preset parameters for the equipment, or physically modify the equipment in any

way, without first verifying with the manufacturer that the change(s) would not adversely affect air contaminant emissions from these units.

- (2) The permittee shall adhere to the manufacturer's recommendations pertaining to the operation of this oven. This emissions unit shall be designed and operated in accordance with the following requirements:
 - a. the secondary combustion chamber shall be operated so that the exit gas temperature from the chamber is, at a minimum, 1,500 degrees Fahrenheit taking into account normal start-up procedures; and
 - b. the secondary combustion chamber shall allow for a minimum of 0.5 second retention time at 1,500 degrees Fahrenheit, taking into account normal start up procedures.
 - (3) The permittee shall adhere to the manufacturer's recommendations pertaining to the operation of the oven and shall comply with the following operational restrictions:
 - a. the permittee shall ensure that the oven is operated only by properly trained personnel who have read, and understand, the oven's operation manual;
 - b. prior to start-up of the furnace the permittee shall remove ash residue left inside the furnace after the previous burn cycle;
 - c. the permittee shall not operate the furnace if the built-in safeguards and interlocks (furnace excess temperature and low water pressure switches) are not operating properly.
 - d. the permittee shall not process uncured paint, or paint sludge, paint filters, PVC lead, plastisols, rubber-coated material, oil, wood, grease, trash, magnesium, or any hazardous waste materials as defined in 40 CFR, Part 261, Subpart D in this furnace. Coating that may contain chlorine (PVC), fluorine (Teflon), or elements other than carbon, hydrogen and oxygen are also prohibited from being burned in this furnace.
 - (4) The permittee shall properly operate and maintain the monitoring devices associated with the oven's safeguards and interlock system [See c)(3)c. above].
 - (5) The permittee shall burn only natural gas as fuel in this emissions unit.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall properly install, operate, and maintain an "electrical interlock system" which involves continuously monitoring the temperature, in degrees Fahrenheit, of the secondary combustion chamber. The interlock system shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The interlock system shall be programmed with a preset parameter that only allows operation of the oven when the temperature in the secondary combustion chamber meets a minimum value of 1,000 degrees Fahrenheit. The interlock system shall also only allow operation of the emissions unit when monitoring devices associated with measuring the temperature in the secondary

combustion chamber are operational (i.e. temperature monitor failure will shutdown emission unit operation).

The minimum temperature value of 1,000 degrees Fahrenheit in the secondary combustion chamber is effective, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the temperature value based upon information obtained during future particulate emission tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the temperature value will not constitute a "modification" of the monitoring requirements of this permit and may be incorporated into the operating permit for the facility.

- (2) The permittee shall maintain records that document the following:
 - a. Any time periods when the interlock system failed to operate in accordance with the requirements outlined in d)(1);
 - b. All instances where the oven was operated with ash residue left inside the oven from a previous operation cycle; and
 - c. All instances where the oven processed any of the materials outlined in c)(3)d.
- (3) The permittee shall maintain daily records of the following information for this emissions unit:
 - a. the dates the emissions units were operated;
 - b. the number of batches processed in the emissions unit for each date the emissions unit was operated; and
 - c. the dates and descriptions of any additional maintenance activities performed on the emissions unit.
- (4) The permittee shall perform checks, per the frequency specified in term d)(5) below, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (5) The checks required by term d)(4) above shall be performed in accordance with the following frequency schedule:
- a. Daily: Perform once per day, on each day the emissions unit is in operation, during the time the emissions unit is operating;
 - b. Weekly: If no visible emissions are detected from the stack in 10 consecutive daily checks performed per “a”, the permittee may decrease the frequency to conduct the checks once every 5 days of operation of the emission unit (one calendar week). If visible stack emissions are detected during these checks, the permittee must resume the checks per the frequency in “a”;
 - c. Monthly: If no visible emissions are detected from the stack in 4 consecutive weekly checks performed per “b”, the permittee may decrease the frequency to conduct the checks once every 21 days of operation of the emission unit (one calendar month). If visible stack emissions are detected during these checks, the permittee must resume the checks per the frequency in “b”;
 - d. Quarterly: If no visible emissions are detected from the stack in 3 consecutive monthly checks performed per “c”, the permittee may decrease the frequency to conduct the checks once every 60 days of operation of the emission unit (3 calendar months). If visible stack emissions are detected during these checks, the permittee must resume the checks per the frequency in “c”.
- (6) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Canton City Health Department Air Pollution Control Division by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA’s “e-Business Center: Air Services” although PERs can be submitted via U.S. postal service or can be hand delivered.

The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements in section d) above:

- a. all days during which any visible particulate emissions were observed;
- b. any corrective actions taken to minimize or eliminate the visible particulate emissions;
- c. Any time period when the secondary combustion chamber was less than the minimum temperature of 1,500 degrees F when the primary burner was in operation;
- d. any time instances where the oven was operated with ash residue left inside the oven from a previous operation cycle; and
- e. all instances where the oven processed any of the materials outlined in c)(3)d.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible particulate emissions from the stack shall not exceed 20% opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be demonstrated with the results of visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

b. Emission Limitation:

0.10 pound of PE per 100 pounds of liquid, semi-solid or solid refuse and salvageable material charged to the incinerator.

Applicable Compliance Method:

Compliance assumed based on potential to emit (PTE) calculations and statements below:

Uncontrolled PTE = (max capacity x % of charged material as possible emissions) / process time

$$= (2300 \text{ lbs} \times 0.01) / 4 \text{ hrs} = 5.8 \text{ lbs total emissions} / \text{hr}$$

Where the value for % of charged material as possible emissions was supplied by facility



As an engineering estimate, 50% of total emissions is considered to be PM₁₀ emissions, with the balance as VOC emissions, based on the results of manufacturer stack test data from a similar oven.

$$\begin{aligned} \text{Uncontrolled PTE PM}_{10} &= (\text{uncontrolled PTE})(50\%) \\ &= (5.8)(0.50) = 2.90 \text{ lbs PM}_{10}/\text{hr} \end{aligned}$$

The above information provides that 1% of the charged material is lost, which is used to calculate the amount of salvageable material charged:

$$0.01 \times 2,300 \text{ lbs} = 23 \text{ lbs lost}; 2,300 - 23 = 2,277 \text{ lbs salvageable material}$$

$$\text{salvageable material per hour} = 2,277 \text{ lbs} / 4 \text{ hrs} = 569.25 \text{ lbs/hr}$$

At the max capacity, the emission limitation allows 0.10 per 100 pounds, or 0.001 lb PE/lb salvageable material. This allows the following:

$$(0.001 \text{ lb PE/lb salvageable material}) \times (569.25 \text{ lbs/hr}) = 0.57 \text{ lb PE/hr}$$

Comparing the uncontrolled PTE to what the limitation allows shows that in order to comply with the emission limitation, the controls need to be installed and operated.

PE is controlled by the secondary combustion chamber. It is assumed the particulate in the exhaust of the secondary combustion chamber is PM₁₀ in size or smaller. The manufacturer has provided stack test data from a similar oven equivalent to 0.009 lb PE/hr controlled maximum for this size oven.

$$\text{Controlled PM}_{10} = 0.009 \text{ lb/hr}$$

Since the controlled PM₁₀ is less than what the limitation allows, compliance is assumed provided compliance is demonstrated with the operational restrictions listed in section c) through the monitoring and recordkeeping listed in section d).

If required, compliance with the PE limitation shall be determined in accordance with OAC rule 3745-17-03(B)(8).

c. Emission Limitation:

0.009 pounds of VOC per hour and 0.040 tons VOC per year.

Applicable Compliance Method:

The emission limitation was established using the potential to emit (PTE) calculations and statements below:

Uncontrolled PTE = (max capacity x % of charged material as possible emissions) / process time

$$= (2300 \text{ lbs} \times 0.01) / 4 \text{ hrs} = 5.8 \text{ lbs total emissions} / \text{hr}$$



Where the value for % of charged material as possible emissions was supplied by facility

As an engineering estimate, 50% of total emissions was considered to be VOC emissions, with the balance as particulate emissions, based on the results of manufacturer stack test data from a similar oven.

$$\begin{aligned} \text{Uncontrolled PTE VOC} &= (\text{uncontrolled PTE})(50\%) \\ &= (5.8)(0.50) = 2.90 \text{ lbs VOC/hr} \end{aligned}$$

VOC is controlled by the secondary combustion chamber. The manufacturer has provided stack test data from a similar oven equivalent to 0.009 lb VOC/hr controlled maximum for this size oven.

$$\text{controlled VOC} = 0.009 \text{ lb/hr} = \text{hourly limitation}$$

The ton per year emission limitation was developed by multiplying the hourly emission limitation by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 pounds per ton. Therefore, compliance with the hourly allowable emission limitation demonstrates compliance with the annual emission limitation.

$$\text{Annual limit} = 0.009 \text{ lb VOC/hr} \times (8760 \text{ hrs} / 1 \text{ yr}) \times (1 \text{ ton})/2000\text{lbs} = 0.040 \text{ ton/yr}$$

Ongoing compliance with the limitations above are assumed provided compliance is demonstrated with the operational restrictions listed in section c) through the monitoring and recordkeeping listed in section d).

If required, the permittee shall demonstrate compliance with the hourly emissions limitation through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Method 18, 25, or 25A. Alternative U.S. EPA approved test methods may be used with prior approval from the Canton City Health Department, Air Pollution Control Division.

g) Miscellaneous Requirements

- (1) None.

2. N004, Big Ace High Temp Heat Cleaning Unit

Operations, Property and/or Equipment Description:

Big Ace High Temp Heat Cleaning Oven used to remove varnish from electrical parts, natural gas fired with 0.975 mmBtu/hr primary burner and secondary combustion chamber with 1.9 mmBtu/hr burner

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. b)(1)b.
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. None.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) June 30, 2008 [Best Available Technology (BAT) for pollutants < 10 tons/yr]	This emissions unit shall be designed to be equipped with a secondary combustion chamber having a minimum temperature of 1,500 degrees Fahrenheit and a minimum residence time of 0.5 seconds, for the control of both particulate (PM ₁₀) and volatile organic compound (VOC) emissions. See b)(2)a, b)(2)b, b)(2)c, c)(2), and c)(5).
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as June 30, 2008.	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM ₁₀ and VOC emissions from this air contaminant source since the controlled potential to emit is less than 10 tons/year taking into account the requirements from OAC rule



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		3745-17-09. See b)(2)d.
c.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
d.	OAC rule 3745-17-09(B)	Particulate emissions shall not exceed 0.10 pounds PE per 100 pounds of liquid, semi-solid or solid refuse and salvageable material charged. See (c)(1)-(5)
e.	OAC rule 3745-17-09(C)	See b)(2)e.
f.	OAC rule 3745-18-06(E)	See b)(2)f.

(2) Additional Terms and Conditions

- a. All particulate emissions are considered to be PM₁₀.
- b. The uncontrolled potential emissions of nitrogen oxides (NO_x), carbon monoxide (CO), and sulfur dioxide (SO₂) from the combustion on natural gas in this emissions unit are negligible (less than 1 ton/year), and therefore emissions limits for this pollutant have not been established.
- c. This Best Available Technology (BAT) emission limit applies until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the Ohio State Implementation Plan (SIP).
- d. These requirements apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio SIP.
- e. Incinerators including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.
- f. This emissions unit is exempt from the requirements of OAC rule 3745-18-06(E) pursuant to OAC rule 3745-18-06(C) because the process weight rate of this emissions unit is equal to or less than 1,000 pounds per hour, taking into account the operational restriction in c)(5).

c) Operational Restrictions

- (1) This emissions unit shall be installed, operated and maintained in accordance with the manufacturer's specifications. The permittee shall not change any of the manufacturer's factory preset parameters for the equipment, or physically modify the equipment in any way, without first verifying with the manufacturer that the change(s) would not adversely affect air contaminant emissions from these units.

- (2) The permittee shall adhere to the manufacturer's recommendations pertaining to the operation of this oven. This emissions unit shall be designed and operated in accordance with the following requirements:
 - a. the secondary combustion chamber shall be operated so that the exit gas temperature from the chamber is, at a minimum, 1,500 degrees Fahrenheit taking into account normal start-up procedures; and
 - b. the secondary combustion chamber shall allow for a minimum of 0.5 second retention time at 1,500 degrees Fahrenheit, taking into account normal start up procedures.
 - (3) The permittee shall adhere to the manufacturer's recommendations pertaining to the operation of the oven and shall comply with the following operational restrictions:
 - a. the permittee shall ensure that the oven is operated only by properly trained personnel who have read, and understand, the oven's operation manual;
 - b. prior to start-up of the furnace the permittee shall remove ash residue left inside the furnace after the previous burn cycle;
 - c. the permittee shall not operate the furnace if the built-in safeguards and interlocks (furnace excess temperature and low water pressure switches) are not operating properly.
 - d. the permittee shall not process uncured paint, or paint sludge, paint filters, PVC lead, plastisols, rubber-coated material, oil, wood, grease, trash, magnesium, or any hazardous waste materials as defined in 40 CFR, Part 261, Subpart D in this furnace. Coating that may contain chlorine (PVC), fluorine (Teflon), or elements other than carbon, hydrogen and oxygen are also prohibited from being burned in this furnace.
 - (4) The permittee shall properly operate and maintain the monitoring devices associated with the oven's safeguards and interlock system [See c)(3)c. above].
 - (5) The permittee shall burn only natural gas as fuel in this emissions unit.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall properly install, operate, and maintain an "electrical interlock system" which involves continuously monitoring the temperature, in degrees Fahrenheit, of the secondary combustion chamber. The interlock system shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The interlock system shall be programmed with a preset parameter that only allows operation of the oven when the temperature in the secondary combustion chamber meets a minimum value of 1000 degrees Fahrenheit. The interlock system shall also only allow operation of the emissions unit when monitoring devices associated with measuring the temperature in the secondary combustion chamber are operational (i.e. temperature monitor failure will shutdown emission unit operation).

The minimum temperature value of 1000 degrees Fahrenheit in the secondary combustion chamber is effective, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the temperature value based upon information obtained during future particulate emission tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the temperature value will not constitute a "modification" of the monitoring requirements of this permit and may be incorporated into the operating permit for the facility.

- (2) The permittee shall maintain records that document the following:
 - a. Any time periods when the interlock system failed to operate in accordance with the requirements outlined in d)(1);
 - b. All instances where the oven was operated with ash residue left inside the oven from a previous operation cycle; and
 - c. All instances where the oven processed any of the materials outlined in c)(3)d.
- (3) The permittee shall maintain daily records of the following information for this emissions unit:
 - a. the dates the emissions units were operated;
 - b. the number of batches processed in the emissions unit for each date the emissions unit was operated; and
 - c. the dates and descriptions of any additional maintenance activities performed on the emissions unit.
- (4) The permittee shall perform checks, per the frequency specified in term d)(5) below, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended.

The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (5) The checks required by term d)(4) above shall be performed in accordance with the following frequency schedule:
- a. Daily: Perform once per day, on each day the emissions unit is in operation, during the time the emissions unit is operating;
 - b. Weekly: If no visible emissions are detected from the stack in 10 consecutive daily checks performed per “a”, the permittee may decrease the frequency to conduct the checks once every 5 days of operation of the emission unit (one calendar week). If visible stack emissions are detected during these checks, the permittee must resume the checks per the frequency in “a”;
 - c. Monthly: If no visible emissions are detected from the stack in 4 consecutive weekly checks performed per “b”, the permittee may decrease the frequency to conduct the checks once every 21 days of operation of the emission unit (one calendar month). If visible stack emissions are detected during these checks, the permittee must resume the checks per the frequency in “b”;
 - d. Quarterly: If no visible emissions are detected from the stack in 3 consecutive monthly checks performed per “c”, the permittee may decrease the frequency to conduct the checks once every 60 days of operation of the emission unit (3 calendar months). If visible stack emissions are detected during these checks, the permittee must resume the checks per the frequency in “c”.
- (6) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Canton City Health Department Air Pollution Control Division by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA’s “e-Business Center: Air Services” although PERs can be submitted via U.S. postal service or can be hand delivered.

The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements in section d) above:

- a. all days during which any visible particulate emissions were observed;



- b. any corrective actions taken to minimize or eliminate the visible particulate emissions;
- c. Any time period when the secondary combustion chamber was less than the minimum temperature of 1,500 degrees F when the primary burner was in operation;
- d. any time instances where the oven was operated with ash residue left inside the oven from a previous operation cycle; and
- e. all instances where the oven processed any of the materials outlined in c)(3)d.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible particulate emissions from the stack shall not exceed 20% opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be demonstrated with the results of visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

b. Emission Limitation:

0.10 pound of PE per 100 pounds of liquid, semi-solid or solid refuse and salvageable material charged to the incinerator.

Applicable Compliance Method:

Compliance assumed based on potential to emit (PTE) calculations and statements below:

Uncontrolled PTE = (max capacity x % of charged material as possible emissions) / process time

$$= (50,000 \text{ lbs} \times 0.01) / 48 \text{ hrs} = 10.4 \text{ lbs total emissions} / \text{hr}$$

Where value of 1% of charged material as possible emissions was supplied by facility

As an engineering estimate, 50% of total emissions is considered to be PM₁₀ emissions, with the balance as VOC emissions, based on the results of manufacturer stack test data from a similar oven.



$$\begin{aligned} \text{Uncontrolled PTE PM}_{10} &= (\text{uncontrolled PTE})(50\%) \\ &= (10.4)(0.50) = 5.20 \text{ lbs PM}_{10}/\text{hr} \end{aligned}$$

The above information provides that 1% of the charged material is lost, which is used to calculate the amount of salvageable material charged:

$$0.01 \times 50,000 \text{ lbs} = 500 \text{ lbs lost}; 50,000 - 500 = 49,500 \text{ lbs salvageable material}$$

$$\text{salvageable material per hour} = 49,500 \text{ lbs} / 48 \text{ hrs} = 1031.25 \text{ lbs/hr}$$

At the max capacity, the emission limitation allows 0.10 per 100 pounds, or 0.001 lb PE/lb salvageable material. This allows the following:

$$(0.001 \text{ lb PE/lb salvageable material}) \times (1031.25 \text{ lbs/hr}) = 1.03 \text{ lb PE/hr}$$

Comparing the uncontrolled PTE to what the limitation allows shows that in order to comply with the emission limitation, the controls need to be installed and operated.

PE is controlled by the secondary combustion chamber. It is assumed the particulate in the exhaust of the secondary combustion chamber is PM₁₀ in size or smaller. The manufacturer has provided stack test data from a similar oven equivalent to 0.023 lb PE/hr controlled maximum.

$$\text{Controlled PM}_{10} = 0.023 \text{ lb/hr}$$

Since the controlled PM₁₀ is less than what the limitation allows, compliance is assumed provided compliance is demonstrated with the operational restrictions listed in section c) through the monitoring and recordkeeping listed in section d).

If required, compliance with the PE limitation shall be determined in accordance with OAC rule 3745-17-03(B)(8).

g) Miscellaneous Requirements

- (1) None.